# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
Improving Public Safety Communications in the 800 MHz Band	)	WT Docket No. 02-55
Consolidating the 800 MHz Industrial/Land Transportation and Business Pool Channels	)	
In the Matter of Amendment of the Commission's	)	
Rules to Allocate Spectrum Below 3 GHz for	)	
Mobile and Fixed Services to Support the	)	ET Docket No. 00-258
Introduction of New Advanced Wireless Services,	)	
Including Third Generation Wireless Systems	)	

#### COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION

The Satellite Industry Association ("SIA")<sup>1</sup> submits these comments in response to the Public Notice<sup>2</sup> seeking comment on the most recent 800 MHz band realignment proposal (the "Joint Proposal")<sup>3</sup> submitted by Nextel Communications, Inc. ("Nextel") and certain members of the Private Wireless Coalition<sup>4</sup> (collectively, the "Joint Proponents") to the extent that it seeks a

<sup>&</sup>lt;sup>1</sup> SIA is a national trade association representing the leading U.S. satellite manufacturers, service providers, and launch service companies. SIA serves as an advocate for the U.S. commercial satellite industry on regulatory and policy issues common to its members. With member service companies providing a broad range of manufactured products and services, SIA represents the unified voice of the U.S. commercial satellite industry. SIA's members include: The Boeing Company; Globalstar, L.P.; Hughes Electronics Corp.; Intelsat; ICO Global Telecommunications; Lockheed Martin Corp.; Loral Space & Communications Ltd.; Mobile Satellite Ventures; PanAmSat Corporation; SES Americom; Teledesic Corporation; TRW Inc., and associate member, Inmarsat.

<sup>&</sup>lt;sup>2</sup> FCC Public Notice, Wireless Telecommunications Bureau Seeks Comment on "Consensus Plan" Filed in the 800 MHz Public Safety Interference Proceeding, DA 02-2202 (Sept. 6, 2002).

<sup>&</sup>lt;sup>3</sup> See Reply Comments of Joint Proponents (Aug. 7, 2002); see also Reply Comments of Nextel (Aug. 7, 2002) (endorsing and elaborating on the Joint 800 MHz Proposal).

<sup>&</sup>lt;sup>4</sup> Other members of the Private Wireless Coalition, including the National Association Manufacturers ("NAM"), MRFAC, Inc. ("MRFAC"), and Small Business in Telecommunications did not join in the Joint Proposal. Significantly, NAM and MRFAC filed separate reply comments opposing the Joint Proponents' proposed relocation *Footnote continues*...

reallocation and licensing of the 1990-1995 MHz band. As demonstrated below, the proposed reallocation of the 1990-1995 MHz band would irreparably harm the worldwide deployment of competitive 2 GHz MSS systems and is not required by the so-called "Consensus Plan." 5

### I. The Proposed Reallocation of 1.9 GHz Would Conflict with International MSS Allocations and Jeopardize Global MSS Deployment

SIA urges the Commission to reject immediately the Joint Proponents' proposal to reallocate the 1990-1995 MHz band for Nextel's use. Contrary to the unsubstantiated claim that a reallocation of the 1990-1995 MHz band "would cause no harm to the development of 2 GHz MSS systems," that action in fact would strike a severe blow to the 2 GHz MSS industry. Specifically, a reallocation of the 1990-1995 MHz band would undermine the Commission's international spectrum harmonization efforts and would impair the ability of consumers to receive the benefits of truly global 2 GHz MSS systems. Only 20 MHz of spectrum (1990-2010 MHz) is allocated for 2 GHz MSS uplink operations both domestically and worldwide. Reallocating the 1990-1995 MHz band would dramatically reduce the amount of spectrum that could be used for 2 GHz MSS uplink operations both domestically and worldwide. The remaining 15 MHz is insufficient to support multiple, commercially viable 2 GHz MSS systems that can offer seamless global coverage for basic and advanced telecommunications services.

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to 1910-1915/1990-1995 MHz spectrum, while generally supporting the Joint Proponents' 800 MHz realignment plan. *See* Reply Comments of NAM & MRFAC, at 3-6 (Aug. 7, 2002).

<sup>&</sup>lt;sup>5</sup> SIA also opposes, on similar grounds, the most recent proposal of certain multipoint distribution service ("MDS") proponents (the "MDS Proponents") to relocate MDS licensees from the 2150-2162 MHz band to the 1990-1996 MHz band at the expense of mobile satellite service ("MSS") licensees. *See* FCC Public Notice, *Wireless Telecommunications Bureau Seeks Comment on "Consensus Plan" Filed in the 800 MHz Public Safety Interference Proceeding*, DA 02-2202 (Sept. 6, 2002); Letter from BellSouth Corp. *et al.* to Hon. Michael K. Powell, Chairman, FCC, ET Docket Nos. 00-258 & 95-18 & IB Docket No. 01-185 (July 11, 2002) ("MDS Letter").

<sup>&</sup>lt;sup>6</sup> See Reply Comments of Nextel at 35.

<sup>&</sup>lt;sup>7</sup> See The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, 15 FCC Rcd 16127, 16130  $\P$  3 (2000) ("2 GHz MSS Rules").

The Joint Proponents' glib dismissal of the impact on 2 GHz MSS is flatly inconsistent with the facts that the Commission has already determined for MSS. Global MSS systems need to operate in globally harmonized allocations, and the currently-licensed 2 GHz MSS systems need more than 15 MHz of globally harmonized spectrum.

Acknowledging that "satellite systems operate most efficiently in a globally consistent allocation of contiguous spectrum," the Commission has attempted to ensure that its domestic 2 GHz MSS allocation is "as consistent as possible" with the international MSS allocations. The existing 2 GHz MSS allocation is the culmination of years of effort by the Commission to harmonize its domestic MSS allocation with the rest of the world. This allocation represents the Commission's well-considered judgment as to the best use of the spectrum and has been reaffirmed on a number of occasions. The Commission therefore must not reverse its 2 GHz MSS allocation policy by upgrading Nextel's spectrum holdings merely to "induce" Nextel to rectify the interference it is causing to the public safety users.

## II. The Proposed Reallocation of 1.9 GHz Would Severely Impair the Rights and Reasonable Expectations of 2 GHz MSS Licensees

In the *3G FNPRM*, the Commission specifically proposed that "any reallocation of existing MSS spectrum would not significantly impair any of the current licensees' rights and reasonable expectations to retain its current assigned spectrum allotment and acquire additional MSS spectrum for purposes of deploying and operating a fully matured 2 GHz MSS system."<sup>10</sup>

<sup>&</sup>lt;sup>8</sup> Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz and 48.2-50.2 GHz Frequency Bands, Further Notice of Proposed Rule Making, 16 FCC Rcd 12244, 12248 ¶ 8 (2001).

<sup>&</sup>lt;sup>9</sup> Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, First Report and Order and Further Notice of Proposed Rule Making, 12 FCC Rcd 7388, 7395 ¶ 14 (1997).

<sup>&</sup>lt;sup>10</sup> See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 16 FCC Rcd 16043 ¶ 29 (2001) ("3G FNPRM").

Contrary to the Commission's proposed objective, a reallocation of the 1990-1995 MHz band in fact would impair 2 GHz MSS licensees' rights and reasonable expectations. The Commission's 2 GHz MSS rules and licensing orders expressly authorize licensees to use on a primary basis any 3.5 MHz of spectrum of their own choosing within the 1990-2025 MHz band. The 2 GHz MSS rules further authorize licensees to aggregate their assigned frequencies through agreements to share use of those frequencies. Thus, a reallocation of the 1990-1995 MHz band would deny 2 GHz MSS licensees their right to use those frequencies on a primary basis or pursuant to spectrum sharing agreements.

Furthermore, the Commission's rules require 2 GHz MSS systems to be capable of operating across at least 70 percent of the 1990-2025 MHz band. <sup>13</sup> 2 GHz MSS licensees are not required to design their systems to operate entirely across the 1990-2025 MHz and 2165-2200 MHz bands in order to comply with this requirement. A reallocation of the 1990-1995 MHz band thus would drastically limit the amount of spectrum available for MSS uplink operations on a primary basis or pursuant to spectrum sharing agreements. Moreover, such a reallocation could cause an MSS licensee to become non-compliant with the 70 percent frequency agility requirement and force it to modify its system at a prohibitive cost to bring it into regulatory compliance. <sup>14</sup>

SIA does not object to Nextel and public safety organizations reconfiguring the bands in which they currently operate to improve their own interference environment. The Joint

 $<sup>^{11}</sup>$  See, e.g., 2 GHz MSS Rules at 16138 ¶ 16 (2000); ICO Services Limited, 16 FCC Rcd 13762, 13774-75 ¶ 32 (IB/OET 2001).

<sup>&</sup>lt;sup>12</sup> See 2 GHz MSS Rules at 16140-41 ¶ 22.

<sup>13</sup> Id

<sup>&</sup>lt;sup>14</sup> In fact, one MSS licensee successfully completed launch of its first satellite over a year ago. Because this satellite was built to operate within the previously designated frequency bands and has been successfully launched, it cannot *Footnote continues*...

Proponents should not, however, be allowed to improve their spectrum requirements at the expense of other services that do not affect, and are not affected by, the Joint Proponents' current operations. Adoption of such a plan would open up every existing allocation to attempts at poaching by licensees that devise a plan to "improve" their own situation. Improvements in spectrum efficiency should be encouraged, but not at the expense of innocent third parties.

Moreover, taking spectrum from MSS to improve public safety services is self-defeating. Besides interference, public safety communications face problems caused by lack of interoperable radio systems and vulnerability, like other mobile terrestrial systems, to terrestrial disasters, such as the collapse of the World Trade Centers. MSS, on the other hand, offers technology that allows multiple public safety organizations to communicate with each other and a network that is not as vulnerable as terrestrial systems, thereby providing critical first response capabilities, as demonstrated during the September 11, 2001 tragedies. Making MSS less effective by limiting its spectrum allocation is inconsistent with the goal of this proceeding and the Joint Proponents' Plan of improving public safety communications in the future.

be modified to accommodate any further changes to the existing frequency plan. *See* ICO Letter of Intent at 15, File No. 188-SAT-LOI-97, IBFS File No. SAT-LOI-19970926-00163 (Sept. 26, 1997).

<sup>&</sup>lt;sup>15</sup> See, e.g., A.M. Squeo, Keeping Post-Disaster Rescuers Connected, WALL STREET JOURNAL, at B1 (Aug. 28, 2002).

### III. The Proposed Reallocation of 1.9 GHz is Unnecessary

A reallocation of the 1990-1995 MHz band to Nextel is entirely unnecessary either to advance the primary objective of the 800 MHz Public Safety<sup>16</sup> proceeding or to implement the core elements of the Joint Proposal. The Commission's stated objective in initiating the 800 MHz Public Safety proceeding is to "improv[e] the spectrum environment for public safety operations in the 800 MHz Band"<sup>17</sup> and, specifically, "to remedy interference to 800 MHz public safety systems consistent with minimum disruption to our existing licensing structure and assurance of sufficient spectrum for critical public safety communications."<sup>18</sup> As a remedy for the existing 800 MHz interference problems, the Joint Proponents propose to realign the 800 MHz band without requiring any incumbent 800 MHz licensee to relocate outside the band.<sup>19</sup> Thus, no replacement spectrum outside of the 800 MHz band would be necessary to accommodate any incumbents displaced as a result of the proposed realignment of the 800 MHz band.<sup>20</sup> Clearly, Nextel's proposal regarding the 1.9 GHz band is neither a necessary nor viable part of that "solution" and does not deserve to be implemented.

### IV. Conclusion

A reallocation of the 1990-1995 MHz band would wreak havoc on 2 GHz MSS licensees who have developed and constructed their systems in reliance upon the Commission's 2 GHz MSS allocation and their reasonable expectations under the 2 GHz MSS rules. Accordingly, SIA

<sup>&</sup>lt;sup>16</sup> See Improving Public Safety Communications in the 800 MHz Band, Notice of Proposed Rulemaking, 17 FCC Rcd 4873 (2002) ("800 MHz Public Safety NPRM").

<sup>&</sup>lt;sup>17</sup> 800 MHz Public Safety NPRM, ¶ 3.

<sup>&</sup>lt;sup>18</sup> *Id*. ¶ 2.

<sup>&</sup>lt;sup>19</sup> See Reply Comments of Joint Proponents at 9-12.

<sup>&</sup>lt;sup>20</sup> Unlike the Joint Proposal, Nextel's original 800 MHz proposal would have required business, industrial, and land transportation and conventional specialized mobile radio licensees in the 800 MHz band to relocate to other bands. *See 800 MHz Public Safety NPRM*, ¶ 25. The Joint Proposal addresses this shortcoming by allowing all 800 MHz incumbents to remain within the band.

urges the Commission to dismiss immediately the Joint Proponents' request for a reallocation of the 1990-1995 MHz band.

Respectfully submitted,

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